

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of attaching a biological molecule to a solid support comprising:

- (a) providing a solid support having at least one available amino group, the solid support being formed from a material selected from the group consisting of cellulose, agarose, polypropylene, polystyrene, polymethacrylate, and nylon;
- (b) reacting the available amino group on the solid support with an activating compound to form an activated support, wherein the activating compound is 1,2,4-carbonyl di-triazole;
- (c) providing a biological molecule having at least one reactive amino, thiol, or hydroxyl group, wherein the biological molecule being a macromolecule is selected from the group consisting of nucleic acids, polypeptide chains, and carbohydrates; and
- (d) reacting the biological molecule with the 1,2,4-carbonyl di-triazole activated support, thereby covalently attaching the biological molecule to the solid support so that the biological molecule is available for use in an assay.

2-4. (Canceled)

5. (Previously Presented) A method according to claim 1 wherein step (c) comprises depositing between about 5 to about 25 nanoliters of the biological molecule in a circular spot at one or more sites on the activated support, wherein the circular spot has a diameter of between about 10 microns to about 500 microns at one or more sites on the activated support.

6. (Previously Presented) A method according to claim 5 wherein one or both of the activating compound and the biological molecule is printed onto the solid support.

7. (Previously Presented) A method according to claim 1 wherein in one or both of step (b) and step (d) occurs in a humid chamber.

8. (Previously Presented) A method according to claim 6 wherein in one or both of step (b) and step (d) occurs in a humid chamber.

9. (Previously Presented) A method according to claim 1 wherein step (b) occurs in an organic solution.

10. (Previously Presented) A method according to claim 9 wherein step (b) occurs in the presence of a tertiary organic base.

11. (Previously Presented) A method according to claim 10 wherein step (d) occurs in an aqueous solution.

12. (Currently Amended) A method of attaching a biological molecule having at least one reactive amino, thiol or hydroxyl group to a solid support, the method comprising:

(a) providing a solid support having at least one available amino group, the solid support being formed as a plate or film adapted for ~~used~~ use in an assay from a material selected from the group consisting of cellulose, agarose, polypropylene, polystyrene, polymethacrylate, and nylon;

(b) reacting the available amino group on the solid support with an activating compound to form an activated support, wherein the activating compound is 1,2,4-carbonyl di-triazole;

(c) providing a biological molecule having at least one reactive amino, thiol, or hydroxyl group, ~~the biological molecule being a macromolecule~~; and

(d) reacting the biological molecule with the 1,2,4-carbonyl di-triazole activated support, thereby covalently attaching the biological molecule to the solid support so that the biological molecule is available for use in the assay.

13-17. (Canceled)

18. (Previously Presented) A method according to claim 1 further comprising the step of washing from the solid support non-bound compounds after step (b) and before step (c).

19-24. (Canceled)

25. (Previously Presented) A method according to claim 1 wherein the biological molecule is an oligonucleotide having at least one free amino or thiol group.
- 26-28. (Canceled).
29. (Previously Presented) A method of attaching a biological molecule to a solid support comprising:
 - (a) providing a solid support having at least one available amino group, the solid support being formed from a material selected from the group consisting of cellulose, agarose, polypropylene, polystyrene, polymethacrylate, and nylon;
 - (b) reacting the available amino group on the solid support with an activating compound, wherein the activating compound is 1,2,4-carbonyl di-triazole;
 - (c) providing a biological molecule, wherein the biological molecule is selected from the group consisting of hormones, therapeutic drugs, and drugs of abuse; and
 - (d) reacting the biological molecule with the 1,2,4-carbonyl di-triazole activated support, thereby covalently attaching the biological molecule to the solid support so that the biological molecule is available for use in an assay.
- 30.-31. (Canceled).
32. (Previously presented) A method according to claim 1 wherein the solid support is a plate or a film adapted for use in an assay.
33. (Previously presented) A method according to claim 1 wherein the solid support is an amine derivatized organic polymer selected from the group consisting of polypropylene, polystyrene, polymethacrylate, and nylon.
34. (Previously Presented) A method according to claim 1 wherein the biological molecule is an amino derivatized oligonucleotide.
- 35.-37. (Canceled).
38. (Previously Presented) A method of attaching an oligonucleotide to a solid support comprising:

- (a) providing a solid support having at least one available amino group, wherein the solid support is an amine derivatized organic polymer selected from the group consisting of polypropylene, polystyrene, polymethacrylate, and nylon;
- (b) reacting the available amino group on the solid support with an activating compound to form an activated support, wherein the activating compound is 1,2,4-carbonyl di-triazole;
- (c) providing an oligonucleotide having at least one free amino or thiol group; and
- (d) reacting the oligonucleotide with the 1,2,4-carbonyl di-triazole activated support, thereby covalently attaching the oligonucleotide to the solid support.

39. (New) The method of claim 29, wherein the biological molecule is a drug of abuse or metabolite thereof.

40. (New) The method of claim 39, wherein the drug of abuse is selected from the group consisting of cocaine, morphine, and nicotine.

41. (New) The method of claim 29, wherein the biological molecule is a therapeutic drug selected from the group consisting of tobramycin, phenobarbital, theophylline, digoxin, tobramycin, phenobarbital, theophylline, digoxin, and gentamycin.

42. (New) A method of attaching a biological molecule to a solid support comprising:

- (a) providing a solid support having at least one available amino group, the solid support being formed from a material selected from the group consisting of cellulose, agarose, polypropylene, polymethacrylate, and nylon;
- (b) reacting the available amino group on the solid support with an activating compound, wherein the activating compound is 1,2,4-carbonyl di-triazole;
- (c) providing a biological molecule, wherein the biological molecule is selected from the group consisting of hormones, therapeutic drugs, and drugs of abuse; and
- (d) reacting the biological molecule with the 1,2,4-carbonyl di-triazole activated support, thereby covalently attaching the biological molecule to the solid support so that the biological molecule is available for use in an assay.